

Permit Fact Sheet

General Information

Permit Number:	WI-0061093-08-0	
Permittee Name:	CRYSTAL LAKE CAMPGROUND AND RV PARK LLC	
Address:	N550 Gannon Road	
City/State/Zip:	Lodi WI 53555-0188	
Discharge Location:	Groundwater of the Lower Wisconsin River Basin (Roxbury Creek Watershed, LW18) in Grant County	
Design Flow(s)	Annual Average	0.01 MGD
Significant Industrial Loading?	None	
Operator at Proper Grade?	Facility is Basic with subclasses A4 – Ponds, Lagoons, & Natural Systems; SS – Sanitary Sewage Collection System. One operator is certified.	
Approved Pretreatment Program?	N/A	

Facility Description

Crystal Lake Campground and RV Park is located in Columbia and Dane County. The proposed permit is a reissuance of the WPDES permit for the Park's wastewater treatment facility (WWTF). Flow consists of wastewater generated by year-round residences, seasonal residences and short-term campers. There are no commercial or industrial sources. Currently three stabilization lagoons are operated in series. Treated effluent from the third pond is annually spray irrigated on approved adjacent farmland. The current system is designed to treat an average flow of 10,000 gallons per day (gpd). It is estimated that flow ranges from 10,000 gpd (in the non-peak seasons) to over 45,000 gpd during peak season. Spray irrigation occurs during the growing season on cropped fields. Solids have not been removed from the lagoons for at least ten years.

Substantial Compliance Determination

(Edit/delete enforcement discussion as needed based on input from compliance staff)

Enforcement During Last Permit:

Provide brief summary of any formal enforcement actions taken during previous permit term. The facility has completed all previously required actions as part of the enforcement process.

After a desk top review of all **Edit list as needed for a facility:** discharge monitoring reports, CMARs, land app reports, compliance schedule items], and a site visit on **Insert Date of Site Visit**, this facility has been found to be in substantial compliance with their current permit.

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, Waste Type/sample Contents and Treatment Description (as applicable)

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701	0.0218 MGD (Nov. 2016 – Nov. 2021 Average)	Representative influent samples shall be collected at the main lift station wet well.
001	0.105 MGD (Nov. 2016 – Nov. 2021 Average)	Representative effluent samples shall be collected from the pump discharge at pond #3, prior to spray irrigation. If there is no discharge in a week, no sample is required.
004	N/A – Lagoon sludge not removed in last permit term	Representative composite solids samples shall be taken from each lagoon and analyzed separately to determine the appropriate land spreading rates. Sampling required in 2023. Additional samples for a subset of parameters, may be required during the land spreading of the solids.

1 Influent - Proposed Monitoring

Sample Point Number: 701- INFLUENT

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
BOD5, Total		mg/L	Monthly	Grab	
Suspended Solids, Total		mg/L	Monthly	Grab	
Nitrogen, Total Kjeldahl		mg/L	Monthly	Grab	
Nitrogen, Organic Total		mg/L	Monthly	Calculated	
Nitrogen, Ammonia (NH3-N) Total		mg/L	Monthly	Grab	

Changes from Previous Permit:

None.

Explanation of Limits and Monitoring Requirements

Standard ch. NR 206, Wis. Adm. Code influent monitoring requirements for a minor municipal facility with seepage cells.

2 Land Treatment – Proposed Monitoring and Limitations

Sample Point Number: 001- Effluent

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Total Daily	
BOD5, Total	Monthly Avg	50 mg/L	Weekly	Grab	Samples are only required for weeks with active spraying.
Fecal Coliform		#/100 ml	Weekly	Grab	Fecal Coliform must be analyzed within six hours of taking the sample. Samples are only required for weeks with active spraying.
Hydraulic Application Rate	Monthly Avg	5,000 gal/ac/day	Monthly	Calculated	Include zeros for days with no discharge. Add the total flow for the month, divide by the total days in the month, and then divide by the total number of acres used that month. Only one value needs to be reported as this is a monthly average.
Suspended Solids, Total		mg/L	Monthly	Grab	Samples are only required for months with active spraying.
pH Lab		su	Monthly	Grab	pH must be reported within six hours of taking the sample. Samples are only required for months with active spraying.
Nitrogen, Total Kjeldahl		mg/L	Monthly	Grab	Samples are only required for months with active spraying.
Nitrogen, Ammonia (NH3-N) Total		mg/L	Monthly	Grab	Samples are only required for months with active spraying.
Nitrogen, Organic Total		mg/L	Weekly	Calculated	Samples are only required for months with active spraying.
Nitrogen, Nitrite + Nitrate Total		mg/L	Monthly	Grab	Samples are only required for months with active

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
					spraying.
Nitrogen, Total		mg/L	Monthly	Calculated	Samples are only required for months with active spraying.
Solids, Total Dissolved		mg/L	Monthly	Grab	Samples are only required for months with active spraying.
Nitrogen, Max Applied On Any Zone	Annual Total	100 lbs/ac/yr	Monthly	Total Annual	Record the total amount of nitrogen applied, as an annual running total. Only one result needs to be reported per month. The loading limit is 100 lbs/acre/year, or as approved in a management plan.

Changes from Previous Permit:

None.

Explanation of Limits and Monitoring Requirements

Requirements for land treatment of municipal wastewater are determined in accordance with ch. NR 206 Wis. Adm. Code.

3 Land Application - Proposed Monitoring and Limitations

Municipal Sludge Description						
Sample Point	Sludge Class (A or B)	Sludge Type (Liquid or Cake)	Pathogen Reduction Method	Vector Attraction Method	Reuse Option	Amount Reused/Disposed (Dry Tons/Year)
004	B	Liquid		Fecal Coliform	Land Application	Do Not Land Apply
Does sludge management demonstrate compliance? Yes						
Is additional sludge storage required? No						
Is Radium-226 present in the water supply at a level greater than 2 pCi/liter? No If yes, special monitoring and recycling conditions will be included in the permit to track any potential problems in land applying sludge from this facility						
Is a priority pollutant scan required? No , design flow is less than 5 MGD. Priority pollutant scans are required once every 10 years at facilities with design flows between 5 MGD and 40 MGD,						

Municipal Sludge Description						
Sample Point	Sludge Class (A or B)	Sludge Type (Liquid or Cake)	Pathogen Reduction Method	Vector Attraction Method	Reuse Option	Amount Reused/Disposed (Dry Tons/Year)
and once every 5 years if design flow is greater than 40 MGD.						

Sample Point Number: 004- LAGOON SOLIDS

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Once	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Once	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Once	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Once	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Once	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Once	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Once	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Once	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Once	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Once	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Once	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Once	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Once	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Once	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Once	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Once	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Once	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Once	Composite	
Nitrogen, Total Kjeldahl		Percent	Once	Composite	
Nitrogen, Ammonium (NH4-N) Total		Percent	Once	Composite	
Phosphorus, Total		Percent	Once	Composite	
Phosphorus, Water Extractable		% of Tot P	Once	Composite	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Potassium, Total Recoverable		Percent	Once	Composite	

Changes from Previous Permit:

None.

Explanation of Limits and Monitoring Requirements

Requirements for land application of municipal sludge are determined in accordance with ch. NR 204 Wis. Adm. Code. Ceiling and high quality limits for metals in sludge are specified in s. NR 204.07(5). Requirements for pathogens are specified in s. NR 204.07(6) and in s. NR 204.07 (7) for vector attraction requirements.

Water Extractable Phosphorus – Water extractable phosphorus (WEP) is the coefficient for determining plant available phosphorus from measured total phosphorus. In Wisconsin, the Penn State Method is utilized and is expressed in percent. While a total P may be significant, the WEP may show that only a small percentage of the P is available to plants because of factors such as treatment processes and chemical addition that “tie-up” phosphorus limiting the amount of phosphorus that is plant available. As part of the Wisconsin’s nutrient management plan (NMP) requirements, the accounting of all fertilizers must be included over the NMP cycle. The fertilizer value of the waste needs to be communicated to the farmer and accounted for in the NMP.

4 Schedules

4.1 Land Treatment Management Plan

An updated management plan is required for the land treatment system (existing spray irrigation system). A management plan may be needed for the proposed facility upgrade.

Required Action	Due Date
Management Plan Submittal: Submit an update to the management plan, if changes are proposed, to optimize the land treatment system performance and demonstrate compliance with ch. NR 206, Wis. Adm. Code. The land treatment system shall be operated in accordance with the approved management plan.	12/31/2022

4.1.1 Explanation of Land Treatment Management Plan

If the permittee chooses to update the management plan for the land treatment system and proposed changes must be submitted to the Department. If the permittee does not choose to land apply, no management plan is required.

4.2 Land Treatment Annual Report

An annual report is due each year that summarizes the previous calendar year's activities.

Required Action	Due Date
Annual Land Treatment Report #1: Submit the Annual Land Treatment Report by January 31st for the previous calendar year.	01/31/2023
Annual Land Treatment Report #2: Submit the Annual Land Treatment Report by January 31st for	01/31/2024

the previous calendar year.	
Annual Land Treatment Report #3: Submit the Annual Land Treatment Report by January 31st for the previous calendar year.	01/31/2025
Annual Land Treatment Report #4: Submit the Annual Land Treatment Report by January 31st for the previous calendar year.	01/31/2026
Annual Land Treatment Report #5: Submit the Annual Land Treatment Report by January 31st for the previous calendar year. Annual Reports shall be submitted every year for the previous calendar year's activities until the permit is reissued. The next annual report is due January 31, 2028 for the 2027 activities.	01/31/2027

4.2.1 Explanation of Annual Land Treatment Report

Annual land treatment reports are being required to provide the Department with a summary of land treatment system operation, seepage cell loadings and all maintenance of each of the cells. The annual reports shall also identify any problems with the seepage cell operation, including any occurrences of seepage from any of the cells.

4.3 Facility Upgrade

The facility is pursuing a facility upgrade. The following schedule shall be followed, including the abandonment of the lagoons (if they are not upgraded).

Required Action	Due Date
Facility Plan: Submit a facility plan that addresses the needed upgrades to the current wastewater treatment system. The plan should look at options associated with upgrading the current treatment system and evaluate new treatment system options. A timeline shall be included.	06/30/2023
Plans and Specifications: Submit plans and specifications, under the seal of a Wisconsin registered engineer, for treatment plant modifications (as needed). The installation of a sampler capable of taking 24-Hour Flow-Composite samples must be included.	12/31/2023
Submit Lagoon Abandonment Plans: If needed, submit plans for the proper abandonment of the lagoons if there are no plans for continued use.	07/31/2024
Complete Construction: Complete all actions necessary to have an upgraded or new treatment system in place.	12/31/2024
Complete Abandonment of Lagoons: If needed, complete the proper abandonment of the lagoons if they will no longer be used. Abandonment must be in accordance with the approved abandonment plan. Documentation of completion must be submitted within 30 days of the abandonment.	12/31/2025

4.3.1 Explanation of Facility Upgrade

The permittee has elected to perform a facility upgrade to address hydraulic loading issues at the facility. The schedule above includes the final items the permittee needs to complete for plans to be approved and construction of the new treatment facility.

Attachments:

Map(s)

Proposed Expiration Date:

A permit term of five years is proposed in this reissuance with an expiration date of March 31, 2027.

Justification of Any Waivers from Permit Application Requirements

No waivers were requested from permit application requirements.

Prepared By:

Sean Spencer – Wastewater Specialist

Date: 12/21/2021

cc: Tanner Connors